

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512



December 7, 2004

Mr. Robert Sarvey  
501 W. Grantline Road  
Tracy, CA 95376

SUBJECT: Pastoria Energy Facility (99-AFC-7C)  
Petition to Modify Emission Reduction Credit Offsets

Dear Mr. Sarvey:

Thank you for your recent letter (attached) concerning the petition to amend the Pastoria Energy Facility's (PEF) Decision to modify their emission reduction credit offset package. Energy Commission staff have reviewed your letter, and the information provided below responds to the issues you raised.

Pre-1990 NOx Credits

The San Joaquin Valley Energy Center (SJVEC) was permitted to use pre-1990 credits by the San Joaquin Valley Air Pollution Control District (District) and the U.S. Environmental Protection Agency (EPA) at the time of that project's licensing. The District did, however, commit to provide EPA with an annual New Source Review Tracking System report to show that the District's attainment plan properly accounts for all the credits in the District bank, including pre-1990 credits. However, there was no limitation placed on PEF regarding pre-1990 credits at the time of its licensing. The formal revision to the PEF offset plan is required under conditions of certification for SJVEC to assure that there is no "double counting" of any emission reduction credits (ERCs) between the two projects. The District, in its review of this revision to the offset package, has indicated that the District's New Source Review requirements have not been re-opened, and that this change is essentially administrative. We did not challenge the District regarding this particular assessment, nor is it appropriate to impose "new" requirements on the PEF license that were not required during the original licensing of the project. We are restricted to determining that the revised offset plan meets both District requirements and our regulatory requirements that were required at the time of the original licensing. We have concluded that the revised PEF offset package meets this criteria.

Location of SO<sub>2</sub> Offsets

The use of ERCs not located near the site carries a distance offset ratio penalty and, more importantly, the use of northern ERCs for this project will be balanced by the use of southern ERCs for other projects, such as the GWF Tracy Peaker project (01-AFC-16). Energy Commission staff believes that in the long term, with the use of appropriate distance and interpollutant offset ratios, the ERC books are balanced. It should also be recognized that, similar to VOC and NOx, which are as precursors to ozone, SO<sub>2</sub> is required to be mitigated because it is a precursor to PM. As such, the effects of these

precursor pollutants tend to be regional in nature so that the exact location of ERCs used for mitigating secondarily formed pollutants is not as critical compared to the location of mitigation for directly emitted pollutants.

#### Age of VOC Offsets

The VOC offsets are post-1990 and, therefore, are not under scrutiny by the U.S. Environmental Protection Agency since they have been properly accounted for in the District's attainment plan. These ERCs come from a southern location, and Energy Commission staff supports their use. We also recognize that the emission reductions associated with these ERCs have been providing air quality benefits since 1991, when they were created. Once the effective distance ratio of 1.37:1 (the 1.5:1 actual distance ratio minus the offset threshold) has been taken into account, these ERCs will continue to provide a basin-wide net reduction in VOC emissions.

#### ERC Package Weakness

We have evaluated the proposed change in the ERC package in the same manner as it was evaluated during its original licensing. We have recommended or approved the use of legally banked credits, which, if not used by Pastoria, could be used by another source at another time and place.

Additionally, other large non-stationary source projects that have emission impacts as great or greater than PEF that are not under the permitting or licensing purview of the District or the Energy Commission (such as major housing developments or major business park projects that stimulate growth) are not offset at all. So, while the emission reductions used to offset PEF may not have occurred this year, or come from a location adjacent to the project site, they are verifiable reductions in emissions that have occurred within the San Joaquin Valley Air Basin.

Again, thank you for your comments. Energy Commission staff intends to recommend approval of this petition to the Energy Commission at the December 15, 2004 Business Meeting. If you have any questions, please contact Mike Ringer, supervisor of our air quality unit at (916) 654-4168 or [mringer@energy.state.ca.us](mailto:mringer@energy.state.ca.us).

Sincerely,

Nancy Tronaas  
Compliance Project Manager

#### Attachment

cc: Barbara McBride, Calpine  
Ed Pike, U.S. Environmental Protection Agency  
Thomas Goff, San Joaquin Valley Air Pollution Control District  
Margret Kim, Public Advisor, Energy Commission  
Mike Ringer, Energy Commission

To Nancy Tronaas, Compliance Project Manager

**SUBJECT: Pastoria Energy Facility (99-AFC-7C) Staff Analysis of Proposed Modifications to Emission Reduction Credit Offsets**

Dear Nancy,

The Emission Reduction package that is being presented here is a large step backwards from previous CEQA Mitigation required by the Energy Commission. Eighty nine percent of The NO<sub>x</sub> offsets from table 1 below were created before 1990 when the clean air act was enacted. The SJVUAPCD and the EPA entered into an agreement during the siting for the San Joaquin Valley Energy Center to limit the use of pre-1990 credits.

**Table 1**  
**Revised NO<sub>x</sub> ERCs Proposed for the Pastoria Energy Facility**

Offset Source Location	Date of Reduction	Credit Number	Total Q1 (lb)	Total Q2 (lb)	Total Q3 (lb)	Total Q4 (lb)	Annual (lb)
525 W. Third Street, Hanford	11/30/87	C-375-2	12,500	12,500	12,500	12,500	50,000
525 W. Third Street, Hanford	11/30/87	C-376-2	54,301	54,301	54,301	54,301	217,204
9571 S. Roberts Rd. Stockton	1/19/88	N-195-2	41,629	41,629	41,629	41,629	167,316
Elk Hills Gas Plant, Kern County	12/6/90	S-1554-2	11,385	12,719	14,051	14,053	52,208
<b>Total ERCs Provided <sup>a</sup></b>	---	---	<b>120,015</b>	<b>121,349</b>	<b>122,681</b>	<b>122,683</b>	<b>486,728</b>
<b>Emissions <sup>b</sup></b>	---	---	<b>85,296</b>	<b>86,243</b>	<b>87,191</b>	<b>87,191</b>	<b>345,921</b>
<b>Offset Ratio</b>	---	---	<b>1.41:1</b>	<b>1.41:1</b>	<b>1.41:1</b>	<b>1.41:1</b>	<b>1.41:1</b>

From: PEF 2004b, Sierra 2004.

Notes:

- The ERCs proposed by the Project owner to either meet District requirement or CEC requirements, whichever is greater.
- CEC calculated total project emissions estimate which includes the District exempt emission units and does not subtract the Districts offset threshold (20,000 lbs/year).

The SO<sub>2</sub> Credits that are being used to offset the Pm -10 impacts from this project are located in Lathrop which is over 200 miles away from the Pastoria Energy Facility and there creation as shown in Table 3 below was January 1, 1990. How can a nexus be established between the PM-10 emissions from this project and the corresponding SO<sub>2</sub> credits which are over 14 years old and were created over 200 miles away?

**AIR QUALITY Table 3**  
**Revised PM10 ERCs Proposed for the Pastoria Energy Facility**

Offset Source Location	Date of Reduction	Credit Number	Total Q1 (lb)	Total Q2 (lb)	Total Q3 (lb)	Total Q4 (lb)	Annual (lb)
16777 S. Howland Rd., Lathrop (SOx) <sup>a</sup>	1/1/90	N-270-5	122,314	123,673	125,032	125,032	496,051
SOx ERCs Used to Offset SOx	—	—	31,358	31,706	32,054	32,054	127,172
SOx ERCs Used to Offset PM10	—	—	90,956	91,967	92,978	92,978	368,879
Quarterly Emissions <sup>b</sup>	—	—	58,311	58,959	59,607	59,607	236,484
Offset Ratio	—	—	1.56	1.56	1.56	1.56	1.56

From: PEF 2004b, 2004c, and Sierra 2004.

Note(s):

- a. ERC N-270-5 is owned by Calpine Corporation, which has allocated credits to PEF (496,051 lbs.) and SJVEC (43,658 lbs.). There are an additional 797,287 lbs. remaining on ERC N-270-5.
- b. CEC calculated total project emissions estimate which includes the District exempt emission units.

The same situation exists with the SO<sub>2</sub> Credits for this project as they are from the same location over 200 miles away and also created on January 1, 1990.

**Table 4**  
**SO<sub>2</sub> ERCs Proposed for the Pastoria Energy Facility**

Offset Source Location	Date of Reduction	Credit Number	Total Q1 (lb)	Total Q2 (lb)	Total Q3 (lb)	Total Q4 (lb)	Annual (lb)
16777 S. Howland Rd., Lathrop <sup>a</sup>	1/1/90	N-270-5	122,314	123,673	125,032	125,032	496,051
SOx ERCs Used to Offset PM10	—	—	90,956	91,967	92,978	92,978	368,879
SOx ERCs to Offset SOx	—	—	31,358	31,706	32,054	32,054	127,172
Quarterly Emissions <sup>b</sup>	—	—	20,905	21,137	21,369	21,369	84,780
Offset Ratio	—	—	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1

From: PEF 2004b, 2004c, and Sierra 2004.

Note(s):

- a. ERC N-270-5 is owned by Calpine Corporation, which has allocated credits to PEF (496,051 lbs.) and SJVEC (43,658 lbs.). There are an additional 797,287 lbs. remaining on ERC N-270-5.
- b. CEC calculated total project emissions estimate which includes the District exempt emission units.

The VOC Reductions for this project are over 13 years old.

**Table 2**  
**Revised VOC ERCs Proposed for the Pastoria Energy Facility**

Offset Source Location	Date of Reduction	Credit Number	Total Q1 (lb)	Total Q2 (lb)	Total Q3 (lb)	Total Q4 (lb)	Annual (lb)
NW 1/4 Section 35, Township 12N, Range 24W Moco T – South <sup>a</sup>	11/26/91	S-1549-1	76,791	77,643	78,496	78,498	311,428
Quarterly Emissions <sup>b</sup>	—	—	56,139	56,762	57,386	57,386	227,673
Offset Ratio	—	—	1.37:1	1.37:1	1.37:1	1.37:1	1.37:1

From: PEF 2004b, Sierra 2004.

Notes:

- a. The ERCs proposed by the project owner to either meet District requirement or CEC requirements, whichever is greater.
- b. CEC calculated total project emissions estimate which includes the District exempt emission units and does not subtract the Districts offset threshold (23,000 lbs/year).

This ERC package for this project is arguably the weakest ever presented in an Energy Commission siting case and one has to wonder how these ERC's can be considered CEQA Mitigation. Please reconsider your approval of this package and provide some meaningful mitigation for the people who live near this project who already suffer from violations of the Federal and State PM-10 and PM-2.5 standards.

Sincerely,

Robert Sarvey  
501 W. Grantline Rd.  
Tracy, Ca. 95376  
(209) 825-7162